

Remarks

In view of the above amendments and the following discussion, the applicants submit that none of the claims now pending in the application are anticipated under the provisions of 35 U. S. C. § 102, or obvious under the provisions of 35 U. S. C. § 103. Thus, the applicants believe that all of these claims are in allowable form.

REJECTIONS

A. 35 U. S. C. § 102

1. Claims 9-11 and 18 are not anticipated by Dunfield et al.

Claims 9-11 and 18 stand rejected under 35 U. S. C. § 102(b) as being anticipated by Dunfield et al. (U. S. Patent 5,587,617 issued December 24, 1996). The applicants submit that these claims are not anticipated by this reference.

Claim 9 is directed to a device used for rotating disk shaped data carriers inside of disk players and/or recorders (*see*, specification at page 1, lines 2-3). The device includes a fixing means 4 and 5, a driving means 6 and a centering means 21 (*see*, FIG. 3 and the specification at page 9, lines 20-30). The fixing means comprises a plate 4 that supports a surface of a data carrier 1 having an opening 2 therein and an elongate part 5 which is inserted in the opening 2 such that the data carrier 1 is removably fixed thereto (*see*, FIG. 2 and the specification at page 8, line 30 to page 8, line 1). The driving means 6 (i.e., electric motor (*see*, specification at page 7, lines 25-26)) acts on the fixing means 4 and 5 through a transmission means 7 (*see*, FIG. 2 and the specification at page 9, lines 1-2). The driving means 6 is partly connected to the disk player and/or recorder through elastical elongation means (e.g., springs 14 and 15)

(see, FIG. 2 and the specification at page 9, lines 2-4). The centering means 21 disposed on the fixing means positions the elongate part 5 of the fixing means in a central position when the driving means 6 stops driving the data carrier 1 (see, FIG. 3 and the specification at page 10, lines 5-8).

Dunfield et al. describes a disk drive assembly 50 (see, Dunfield et al. at FIG. 2 and column 5, lines 52-53). In disk drive assembly 50, a disk 60 is journaled about a shaft 62 that is rotated by an underlying spindle motor (see, Dunfield et al. at FIG. 2 and column 5, lines 56-58). The spindle motor may be a magnetic bearing assembly 300 (see, Dunfield et al. at FIG. 3 and column 6, lines 3-5). The magnetic bearing assembly 300 includes a stator 312 having a conventional axial pivot 314 around which a hub shaft 316 of the rotor 317 rotates (see, Dunfield et al. at FIG. 3 and column 6, lines 5-8).

Dunfield et al. does not describe or suggest a device for rotating disk shaped data carriers inside disk players and/or recorders having a centering means disposed on a fixing means for positioning the fixing means in a central position when a driving means stops driving a data carrier. Rather, Dunfield et al. discloses a completely different arrangement in which a disk is journaled about a shaft that is rotated by a spindle motor comprising a magnetic bearing assembly. Since Dunfield et al. does not teach disposing a centering means on a fixing means for positioning the fixing means in a central position when a driving means stops driving a data carrier, claim 9 is patentable over Dunfield et al.

Claim 10 depends directly from claim 9 and recites a limitation that a rotor magnet of a driving means is repulsed at a determined distance from a stator electro-magnet by magnetic forces when the driving means drives the data carrier. Applicants respectfully traverse this rejection.

Dunfield et al. does not describe or suggest a device for rotating disk shaped data carriers inside disk players and/or recorders having a centering means disposed on a fixing means for positioning the fixing means in a central

position when a driving means stops driving a data carrier and further wherein a rotor magnet of the driving means is repulsed at a determined distance from a

stator electro-magnet by magnetic forces when the driving means drives the data carrier. Rather, Dunfield et al. discloses a completely different arrangement in which a disk is journaled about a shaft that is rotated by a spindle motor comprising a magnetic bearing assembly. Since Dunfield et al. does not teach disposing a centering means on a fixing means for positioning the fixing means in a central position when a driving means stops driving a data carrier, claim 10 is patentable over Dunfield et al.

Claim 11 depends directly from claim 9 and recites a limitation that the elongate part of the fixing means has a point contact with the player and/or recorder such that a rotation axis of the fixing means passes through the point contact. Applicants respectfully traverse this rejection.

Dunfield et al. does not describe or suggest a device for rotating disk shaped data carriers inside disk players and/or recorders having a centering means disposed on a fixing means for positioning the fixing means in a central position when a driving means stops driving a data carrier and further wherein an elongate part of the fixing means has a point contact with the player and/or recorder such that a rotation axis of the fixing means passes through the point contact. Rather, Dunfield et al. discloses a completely different arrangement in which a disk is journaled about a shaft that is rotated by a spindle motor comprising a magnetic bearing assembly. Since Dunfield et al. does not teach disposing a centering means on a fixing means for positioning the fixing means in a central position when a driving means stops driving a data carrier, claim 11 is patentable over Dunfield et al.

Claim 18 depends from claim 10 and recites a limitation that the elongate part of the fixing means has a point contact with the player and/or recorder such that a rotation axis of the fixing means passes through the point contact. Applicants respectfully traverse this rejection.

Dunfield et al. does not describe or suggest a device for rotating disk shaped data carriers inside disk players and/or recorders having a centering means disposed on a fixing means for positioning the fixing means in a central

position when a driving means stops driving a data carrier, wherein a rotor magnet of the driving means is repulsed at a determined distance from a stator electro-magnet by magnetic forces when the driving means drives the data carrier and further wherein an elongate part of the fixing means has a point contact with the player and/or recorder such that a rotation axis of the fixing means passes through the point contact. Rather, Dunfield et al. discloses a completely different arrangement in which a disk is journaled about a shaft that is rotated by a spindle motor comprising a magnetic bearing assembly. Since Dunfield et al. does not teach disposing a centering means on a fixing means for positioning the fixing means in a central position when a driving means stops driving a data carrier, claim 18 is patentable over Dunfield et al.

B. 35 U. S. C. § 103

1. Claim 19 is not obvious over Dunfield et al. in view of Elsing et al.

Claim 19 stands rejected under 35 U. S. C. § 103(a) as being obvious over Dunfield et al. (U. S. Patent 5,587,617 issued December 24, 1996) in view of Elsing et al. (U. S. Patent 5,140,479 issued August 18, 1992). The applicants submit that these claims are not rendered obvious by the combination of these references.

Claim 19 depends directly from claim 9 and is directed to a device used for rotating disk shaped data carriers inside of disk players and/or recorders (see, specification at page 1, lines 2-3). The device includes a fixing means 4 and 5, a driving means 6 and a centering means 21 (see, FIG. 3 and the specification at

page 9, lines 20-30). The fixing means comprises a plate 4 that supports a surface of a data carrier 1 having an opening 2 therein and an elongate part 5 which is inserted in the opening 2 such that the data carrier 1 is removably fixed thereto (*see*, FIG. 2 and the specification at page 8, line 30 to page 8, line 1). The driving means 6 (i.e., electric motor (*see*, specification at page 7, lines 25-26)) acts on the fixing means 4 and 5 through a transmission means 7 (*see*, FIG. 2 and the specification at page 9, lines 1-2). The driving means 6 is partly connected to the disk player and/or recorder through elastical elongation means (e.g., springs 14 and 15) (*see*, FIG. 2 and the specification at page 9, lines 2-4). The centering means 21 disposed on the fixing means positions the elongate part 5 of the fixing means in a central position when the driving means 6 stops driving the data carrier 1 (*see*, FIG. 3 and the specification at page 10, lines 5-8). The centering means comprises a conical recess which receives a tip shaped extremity from the fixing means and is elastically mounted to the player and/or recorder (*see*, FIG. 3 and the specification at page 10, lines 5-10).

Dunfield et al. describes a disk drive assembly 50 (*see*, Dunfield et al. at FIG. 2 and column 5, lines 52-53). In disk drive assembly 50, a disk 60 is journaled about a shaft 62 that is rotated by an underlying spindle motor (*see*, Dunfield et al. at FIG. 2 and column 5, lines 56-58). The spindle motor may be a magnetic bearing assembly 300 (*see*, Dunfield et al. at FIG. 3 and column 6, lines 3-5). The magnetic bearing assembly 300 includes a stator 312 having a conventional axial pivot 314 around which a hub shaft 316 of the rotor 317 rotates (*see*, Dunfield et al. at FIG. 3 and column 6, lines 5-8).

Dunfield et al. does not describe or suggest a device for rotating disk shaped data carriers inside disk players and/or recorders having a centering means disposed on a fixing means for positioning the fixing means in a central position when a driving means stops driving a data carrier in which the centering means comprises a conical recess which receives a tip shaped extremity from the fixing means and is elastically mounted to the player and/or recorder. Rather, Dunfield et al. discloses a completely different arrangement in which a disk is

journaled about a shaft that is rotated by a spindle motor comprising a magnetic bearing assembly. Since Dunfield et al. does not teach disposing a centering means on a fixing means for positioning the fixing means in a central position when a driving means stops driving a data carrier in which the centering means comprises a conical recess which receives a tip shaped extremity from the fixing means and is elastically mounted to the player and/or recorder, claim 19 is patentable over Dunfield et al.

Elsing et al. discloses a magnetic disc drive 10 (see, Elsing et al. at FIG. 1 and column 2, lines 61-62). The disc drive 10 includes a spindle 14, to which a magnetic disc 12 is fastened (see, Elsing et al. at FIG. 2 and column 2, line 62). The spindle 14 and magnetic disc 12 are rotated by a disc drive motor 15 (see, Elsing et al. at FIG. 2, lines 63-64). A contact button 36 protruding from the spindle 14 contacts a flat contact arm 32 that is positioned over the spindle 14 to electrically ground the spindle 14 (see, Elsing et al. at FIG. 2 and column 3, lines 13-27).

Elsing et al. does not describe or suggest a device for rotating disk shaped data carriers inside disk players and/or recorders having a centering means disposed on a fixing means for positioning the fixing means in a central position when a driving means stops driving a data carrier, wherein the centering means comprises a conical recess which receives a tip shaped extremity from the fixing means and is elastically mounted to the player and/or recorder. Rather, Elsing et al. discloses a completely different arrangement in which a disc attached to a spindle is rotated by a disc drive motor and a contact button protruding from the spindle contacts a flat contact arm that is positioned over the spindle to electrically ground the spindle. Since Elsing et al. does not teach disposing a centering means on a fixing means for positioning the fixing means in a central position when a driving means stops driving a data carrier, wherein the centering means comprises a conical recess which receives a tip shaped extremity from the fixing means and is elastically mounted to the player and/or recorder, claim 19 is patentable over Elsing et al.

Furthermore, since Dunfield et al only teaches a disk is journaled about a shaft that is rotated by a spindle motor comprising a magnetic bearing assembly and Elsing et al. only teaches a disc attached to a spindle is rotated by a disc drive motor and a contact button protruding from the spindle contacts a flat contact arm that is positioned over the spindle to electrically ground the spindle, the combination of these references does not describe or suggest applicant's arrangement recited in claim 19. In particular, claim 19 recites disposing a centering means on a fixing means for positioning the fixing means in a central position when a driving means stops driving a data carrier, wherein the centering means comprises a conical recess which receives a tip shaped extremity from the fixing means and is elastically mounted to the player and/or recorder. Thus, claim 19 is patentable over the combination of these references.

CONCLUSION

Thus, the applicants submit that none of the claims, presently in the application, are anticipated under the provisions of 35 U. S. C. § 102, or obvious under the provisions of 35 U. S. C. § 103. Consequently, the applicants believe that all of the claims are presently in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.


If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Ms. Patricia A. Verlangieri, at (609) 734-6867, so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

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No fee is believed due. However, if a fee is due, please charge the additional fee to Deposit Account 07-0832.

Respectfully submitted,


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